

Notice of Allowability**Application No.**

10/501,351

Applicant(s)

SAMUKAWA ET AL.

Examiner

RAKESH K. DHINGRA

Art Unit

1792

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to After final response dt. 12/012008.
2. ☒ The allowed claim(s) is/are 1,2 and 5-13.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some* c) ☐ None of the:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
(a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
(b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☒ Interview Summary (PTO-413),
Paper No./Mail Date 12/11/08.
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

/Rakesh K Dhingra/
Examiner, Art Unit 1792

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Norman P. Soloway on 12/11/08.

The application has been amended as follows:

In the claims:

Claim 1 (currently amended): An on-wafer monitoring system capable of measuring an operation of a plasma treatment apparatus on a wafer, said system comprising:

one or a plurality of sensor sections, a power source unit, and an I/O unit that inputs/outputs signals from/to outside, which are provided on a silicon substrate,

wherein each of said sensor sections has a pattern portion which comprises an SiO₂ layer, and which is a plasma treatment target, and under said pattern portion, ~~of~~ a plurality of electrodes are disposed for separating ions and electrons of plasma by energy, and an uppermost electrode of said electrodes has the same potential as that of said silicon substrate, and a plurality of pores of predetermined size formed through both said pattern portion and said plurality of electrodes, and

a sensor formed at the bottom of each sensor section,

wherein said power source unit takes out power from plasma potential or takes out power from photoelectromotive force of a PLZT device.

Allowable Subject Matter

Claims 1, 2 and 5-13 allowed.

Reasons for Allowance

The following is an examiner's statement of reasons for allowance:

Closest prior art [(Ma et al – 6,576,922), (Smesny et al – 5,444,637)] do not teach claim limitation “wherein each of said sensor sections has a pattern portion which comprises an SiO₂ layer, and which is a plasma treatment target, and under said pattern portion, a plurality of electrodes are disposed for separating ions and electrons of plasma by energy, and an uppermost electrode of said electrodes has the same potential as that of said silicon substrate, and a plurality of pores of predetermined size formed through both said pattern portion and said plurality of electrodes, and a sensor formed at the bottom of each sensor section” in the context of remaining limitations of the claim.

Conclusion

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled “Comments on Statement of Reasons for Allowance.”

Any inquiry concerning this communication or earlier communications from the examiner should be directed to RAKESH K. DHINGRA whose telephone number is (571)272-5959. The examiner can normally be reached on 8:30 -6:00 (Monday - Friday).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Parviz Hassanzadeh can be reached on (571)-272-1435. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Rakesh K Dhingra/
Examiner, Art Unit 1792

/Parviz Hassanzadeh/
Supervisory Patent Examiner, Art Unit 1792